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Intermittent flushing improves cannula patency compared to continuous infusion for peripherally inserted venous catheters in newborns: results from a prospective observational study

Perez, Anna ; Feuz, Isabelle ; Brotschi, Barbara ; Bernet, Vera

Abstract: AIMS: Peripheral cannulas in newborns are commonly used for intravenous treatment. However sustained maintenance of cannula patency is often difficult to achieve in this age group. This study compares the duration for which cannula patency can be maintained in newborns under continuous infusion, or an intermittent flushing regimen, with normal saline. **METHODS:** A prospective observational study was conducted during a 12-month period. All newborns admitted to the 16-bed intermediate care unit, who required intravenous treatment, received either continuous peripheral infusion with 0.9% saline at an infusion rate of 2 mL/h or an intravenous cannula, which was flushed with 1 mL of 0.9% saline at least once every 24 h. **RESULTS:** A total of 53 patients with 86 cannulas were included. Twenty-five (47%) patients received 41 continuous infusions. The intermittent flushing group consisted of 28 (53%) patients with 45 cannulas administered. The cannula patency was significantly longer in the intermittent flushing group (mean 62.1 vs. 92.8 h, $P=0.01$). The patient's underlying disease and the cannula insertion site were not related with the duration of the cannula patency. **CONCLUSIONS:** Our study shows that intermittent cannula flushing is associated with improved cannula patency for peripherally inserted venous catheters in newborns.

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Congress Calendar

**7th World Congress of Perinatal Medicine in
Developing Countries**

March 29–31, 2012, Cairo, Egypt

www.wcpmalex2012.com

3rd Symposium Fetal Neurology

May 4–6, 2012, Dubrovnik, Croatia

www.iandonaldschool.com

**13. European Congress of Perinatal Medicine
Paris, France**

June 13–16, 2012

<http://www.mcaevents.org/ecpm2012/>

**XX. FIGO World Congress of Obstetrics and
Gynecology, Rome, Italy**

October 7–12, 2012

http://www.figo.org/congress/congress_2012

**8th World Congress of Perinatal Medicine in
Developing Countries**

September 3–6, 2014, Cancun, Mexico

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12th Congress of Perinatal Medicine

November 2015, Madrid, Spain

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